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Application Number	09/766,162
Filing Date	01-19-2001
First Named Inventor	Donald S. Gardrer
Art Unit	2832
Examiner Name	Not yet assigned O # m
Attorney Docket Number	42390P10775 3 - Z

			U.S. PAT	ENT DOCUMENTS	II R
Examiner Initials	Cite No.1	Document Number Number - Kind Code ² (if known	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, enes, Where Relevant Passages & Relevant Figures Appear
177		US- 3881244	05-06-1975	Kendall	
		us- 5095357	03-10-1992	Andoh et al.	
		US- 5635892	06-03-1997	Ashby et al.	
		US- 5801100	09-01-1998	Lee et al.	
7/2		US- 5877533	03-02-1999	Arai et al.	
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TIN		EP 0 725 407 - A1	08-07-1996	IBM Corporation		
TIN		WO 01/39220 - A1	05-31-2001	Intel Corporation		
TIN		JP 07-272932	10-20-1995	Canon Inc.		
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7			OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
I	Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	TIN		K. SHIRAKAWA, ET AL., "Thin Film Cloth-Structured Inductor For Magnetic Integrated Circuit," IEEE Transactions on Magnetics, September 1990, pp. 2262-2264, Vol. 26, No. 5.	
	KIN		M. YAMAGUCHI, ET AL., "Characteristics Of Magnetic Thin-Film Inductors At Large Magnetic Field," IEEE Transactions on Magnetics, November 1995, pp. 4229-4231, Vol. 31, No. 6.	
	TIN		E. BRANDON, ET AL., "Microinductors For Spacecraft Power Electronics," Magnetic Materials, Processes, and Devices VI Applications to Storage and Microelectromechanical Systems (MEMS), 2001, pp. 559-567, Vol. 2000-29, The Electrochemical Society, Inc., Pennington, New Jersey.	
		/	ERIK J. BRANDON, "Passive Components For Systems-On-A-Chip Applications," Center for Integrated Space Microsystems, Jet Propulsion Laboratory.	
	1/1/		S.S. MOHAN, ET AL., "Simple Accurate Expressions For Planar Spiral Inductances," IEEE Journal of Solid-State Circuits, October 1999, pp. 1419-1424, Vol. 34, No. 10.	
			JOACHIM N. BURGHARTZ, "Integrated Multilayer RF Passives in Silicon Technology," IBM Research Division, Yorktown Heights, NY.	
	150		JAE YEONG PARK, ET AL., "Batch-Fabricated Microinductors With Electroplated Magnetically Anisotropic and Laminated Alloy Cores," IEEE Transactions on Magnetics, September 1999, pp. 4291-4300, Vol. 35, No. 5.	
	TIN		M. YAMAGUCHI, ET AL., "MGHz-Drive Magnetic Thin-Film Inductors For RF Integrated Circuits Using Micro-Patterned Granular Film" IEEE, 1990. No MONT H	
	TIN TIN		ALI M. NIKNEJAD and ROBERT G. MEYER, "Analysis, Design, and Optimization of Spiral Inductors and Transformers for Si RF IC's," IEEE Journal of Solid-State Circuits, October 1998, pp. 1470-1481, Vol. 33, No. 10.	
	AIN		DONALD S. GARDNER and PAUL A. FLINN, "Mechanical Stress As A Function Of Temperature For Aluminum Alloy Films," Journal of Applied Physics, February 15, 1990, pp. 1831-1845, Vol. 67.	
	.712		M. BABA, ET AL., "GHz-Drive Magnetic Thin-Film Inductor Using CoNbZr Film," Journal of the Magnetics Society of Japan, 2000.	
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7		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
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KIN		Y. KOBAYASHI, ET AL., "New Type Micro Cloth-Inductor And Transformer With Thin Amorphous Wires And Multi-Thin Coils," IEEE Transactions on Magnetics, September 1992, pp. 3012-3014, Vol. 28, No. 5.	
TIN		H. MATSUKI and K. MURAKAMI, "A New Cloth Inductor Using Amorphous Fiber," IEEE Transactions on Magnetics, September 1985, pp. 1738-1740, Vol. MAG-21, No. 5.	
KIN		V. KORENIVSKI and R.B. VAN DOVER, "Magnetic Film Inductors For Radio Frequency Applications," Journal of Applied Physics, November 15, 1997, pp. 5247-5254, Vol. 82.	
112		M. YAMAGUCHI, ET AL., "Microfabrication And Characteristics Of Magnetics Thin-Film Inductors In The Ultrahigh Frequency Region," Journal of Applied Physics, June 1, 1999, pp. 7919-7922, Vol. 85, No. 11.	
777		JOHN R. LONG and MILES A. COPELAND, "The Modeling, Characterization, And Design Of Monolithic Inductors For Silicon RF IC's," IEEE Journal of Solid-State Circuits, March 1997, pp. 357-369, Vol. 32, No. 3.	
117		M. YAMAGUCHI, ET AL., "Magnetic Thin-Film Inductor For RF Integrated Circuits," Extended Abstracts of the 1999 International Conference on Solid-State Devices and Materials, 1999, pp. 580-281, Tokyo.	
117		T. SATO, ET AL., "New Applications of Nanocrystalline Fe(Co-Fe)-Hf-O Magnetic Films To Micromagnetic Devices," Journal of Applied Physics, June 1, 1998, pp. 6658-6660, Vol. 83, No. 11.	
MN		A. FESSANT, ET AL., "Influence Of In-Plane Anisotropy And Eddy Currents On The Frequency Spectra Of The Complex Permeability Of Amorphous CoZr Films," IEEE Transactions of Magnetics, January 1993, pp. 82-87, Vol. 29, No. 1.	
		JOACHIM N. BURGHARTZ, "Progress In RF Inductors On Silicon—Understanding Substrate Losses," IBM Research Division, Yorktown Heights, NY.	
MIN		S. YABUKAMI, ET AL., "Noise Analysis Of A MHz-3 GHz Magnetic Thin Film Permeance Meter," Journal of Applied Physics, April 15, 1999, pp. 5148-5150, Vol. 85. No. 8.	
		JAE PARK and MARK G. ALLEN, "Bar-Type Microinductors and Microtransformers With Electroplated Alloy Cores," Magnetic Devices Research, sponsored by Packaging Research Center.	

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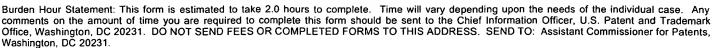
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		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
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		ERIK BRANDON, "System On A Chip Integrated Passive Components (µIRS)"	
KN		MASAHIRO YAMAGUCHI, "Magnetic Films For Planar Inductive Components And Devices," Handbook of Thin Film Devices, edited by M.H. Francombe, 2000, pp. 185-186, Vol. 4: Magnetic Thin Film Devices.	
1/17		S.S. MOHAN, ET AL., "Bandwidth Extension In CMOS With Optimized On-Chip Inductors," IEEE Journal of Solid-State Circuits, March 2000, pp. 346-355, Vol. 35, No. 3.	-
		S.S. MOHAN, ET AL., "Modeling And Characterization Of On-Chip Transformers," Center for Integrated Systems, Stanford University, Stanford, CA 94305.	
		M.M. MOJARRADI, ET AL., "Power Management And Distribution For System On A Chip For Space Applications," Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration, Paper No. 284.	
MY		TERENCE O'DONNEL, ET AL., "Microtransformers and Inductors Using Permalloy Thin Films," Preparation, Properties, and Applications of Thin Ferromagnetic Films, June 2000, pp. 45-52.	
ALL		C. PATRICK YUE and S. SIMON WONG, "On-Chip Spiral Inductors With Patterned Ground Shields For Si-Based RF IC's," IEEE Journal of Solid-State Circuits, May 1998, pp. 743-752, Vol. 33, No. 5.	
		DONALD S. GARDNER, United States Patent Application for "Method and Apparatus for Providing Inductor for Integrated Circuit or Integrated Circuit Package".	
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